

IP-022824
Appl. No. 10/632,383
Amdt. dated May 4, 2005
Reply to Office Action dated November 4, 2004

**MARKED UP COPY OF THE PARAGRAPH BEGINNING AT LINE 21 AND ENDING
WITH LINE 24 ON PAGE 3**

The present invention provides an improved open-topped tray having upright peripheral side and end walls. A central portion of the opposing end walls is ~~are~~ inwardly positioned by use of an inwardly offset central portion of the end score line that permits optimization of the tray dimensions at minimal cost.

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WITH LINE 24 ON PAGE 3**

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IP-022824
Appl. No. 10/632,383
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**MARKED UP COPY OF THE PARAGRAPH BEGINNING AT LINE 1 AND ENDING
WITH LINE 15 ON PAGE 4**

The tray is formed from a blank having a bottom panel defined by two opposing end score lines and two opposing side score lines, wherein a central portion ~~central portions~~ of each opposing end score line is ~~lines are~~ inwardly offset or positioned. The blank has additional score and cut lines that define opposing end panels, opposing side panels, and side flaps foldably attached to the edges of each of the side panels. The blank is folded and the opposing end and side panels are folded into an upright position, providing the outer walls of the tray. The side flaps fold inward, toward the interior of the tray, and adhere to the interior side of the end panels, holding all upright side and end panels secure. The side flaps line in the same plane as the ~~inwardly offset portions of the end score lines fold to a same horizontal plane as the inwardly~~ positioned score lines, such that a dimensional space within the interior of the tray is effectively the same between the side flaps on opposing end panels as it is between the inwardly offset central portions of the end score lines at the opposing ends of the tray ~~positioned score lines at the base of opposing end panels of the tray~~. Essentially, the inwardly positioned portions of the end score lines move central portions of the end walls inward to fill the gaps between opposing side flaps, equalizing the interior dimensions of the tray.

**CLEAN COPY OF THE PARAGRAPH BEGINNING AT LINE 1 AND ENDING WITH
LINE 15 ON PAGE 4**

The tray is formed from a blank having a bottom panel defined by two opposing end score lines and two opposing side score lines, wherein a central portion of each opposing end score line is inwardly offset or positioned. The blank has additional score and cut lines that define opposing end panels, opposing side panels, and side flaps foldably attached to the edges of each of the side panels. The blank is folded and the opposing end and side panels are folded into an upright position, providing the outer walls of the tray. The side flaps fold inward, toward

IP-022824

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10 the interior of the tray, and adhere to the interior side of the end panels, holding all upright side and end panels secure. The side flaps line in the same plane as the inwardly offset portions of the end score lines, such that a dimensional space within the interior of the tray is effectively the same between the side flaps on opposing end panels as it is between the inwardly offset central portions of the end score lines at the opposing ends of the tray. Essentially, the inwardly positioned portions of the end score lines move central portions of the end walls inward to fill the gaps between opposing side flaps, equalizing the interior dimensions of the tray.

IP-022824
Appl. No. 10/632,383
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**MARKED UP COPY OF THE PARAGRAPH BEGINNING AT LINE 6 AND
ENDING WITH LINE 7 ON PAGE 5**

Fig. 2a is a top ~~an exploded~~ perspective view of an erected container having end walls inwardly spaced along offset end score lines.

**CLEAN COPY OF THE PARAGRAPH BEGINNING AT LINE 6 AND ENDING
WITH LINE 7 ON PAGE 5**

Fig. 2a is a top perspective view of an erected container having end walls inwardly spaced along offset end score lines.

**MARKED UP COPY OF THE PARAGRAPH BEGINNING AT LINE 8 AND
ENDING WITH LINE 9 ON PAGE 5**

Fig. 2b is an enlarged, fragmentary a perspective view of the interior of one end of an erected container having end walls inwardly spaced along offset end score lines.

**CLEAN COPY OF THE PARAGRAPH BEGINNING AT LINE 8 AND ENDING
WITH LINE 9 ON PAGE 5**

Fig. 2b is an enlarged, fragmentary perspective view of the interior of one end of an erected container having end walls inwardly spaced along offset end score lines.

**MARKED UP COPY OF THE PARAGRAPH BEGINNING AT LINE 10 AND
ENDING WITH LINE 11 ON PAGE 5**

Fig. 2c is a bottom perspective view of the exterior of an erected container having end walls inwardly spaced along offset end score lines.

**CLEAN COPY OF THE PARAGRAPH BEGINNING AT LINE 10 AND ENDING
WITH LINE 11 ON PAGE 5**

Fig. 2c is a bottom perspective view of the exterior of an erected container having end walls inwardly spaced along offset end score lines.

IP-022824
Appl. No. 10/632,383
Amdt. dated May 4, 2005
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**MARKED UP COPY OF THE PARAGRAPH BEGINNING AT LINE 18 ON
PAGE 7 AND ENDING WITH LINE 2 ON PAGE 8**

The score line that foldably connects an end ends panel 22 with the bottom panel 10 is a generally straight score line 18 with an inwardly offset centrally located score line portion 32. Angled score lines 36 connect score line 18 with the inwardly offset or positioned score line 34. Score line 18 forms a typical bending base line about which the end panel folds upright, such that
5 the base line is the base of the end panel and the outermost side edge of the tray bottom. The inwardly positioned score line 34 is positioned inside the base line, slightly shrinking a central portion of the base panel. Correspondingly, the size of the end panel increases an equivalent area. Thus, the base line is altered ~~for the time~~ where the score line is inwardly positioned, advantageously creating a ~~creating a advantageous~~ sculpted score line about which the end panel
10 can fold upright.

**MARKED UP COPY OF THE PARAGRAPH BEGINNING AT LINE 18 ON PAGE 7
AND ENDING WITH LINE 2 ON PAGE 8**

The score line that foldably connects an end panel 22 with the bottom panel 10 is a generally straight score line 18 with an inwardly offset centrally located score line portion 32. Angled score lines 36 connect score line 18 with the inwardly offset or positioned score line 34. Score line 18 forms a typical bending base line about which the end panel folds upright, such that
5 the base line is the base of the end panel and the outermost side edge of the tray bottom. The inwardly positioned score line 34 is positioned inside the base line, slightly shrinking a central portion of the base panel. Correspondingly, the size of the end panel increases an equivalent area. Thus, the base line is altered where the score line is inwardly positioned, advantageously creating a sculpted score line about which the end panel can fold upright.

IP-022824
Appl. No. 10/632,383
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**MARKED UP COPY OF THE PARAGRAPH BEGINNING AT LINE 1 ON PAGE 9 AND
ENDING WITH LINE 9 ON PAGE 9**

Due to offset score lines 32, the width ~~length~~ of the end panel is greater between upper edge 46 and inwardly positioned score lines 34 and 36 than between edge 46 and score line 18. However, this extra width ~~length~~ in the central portion of the end wall is compensated for with a slight inward curve of the central portion of the end wall, resulting in additional distance
5 traveled. Consequently, the height of the end panel along upper edge 46 is the same for the entire end wall, even ~~though~~ ~~though~~ the width ~~length~~ of the end panel differs from location to location. Further, due to the combination of the offset score lines and the outer side flap portions, the interior of the tray is effectively equidistant from each other across the entire base of the end wall.

**CLEAN COPY OF THE PARAGRAPH BEGINNING AT LINE 1 ON PAGE 9 AND
ENDING WITH LINE 9 ON PAGE 9**

Due to offset score lines 32, the width of the end panel is greater between upper edge 46 and inwardly positioned score lines 34 and 36 than between edge 46 and score line 18. However, this extra width in the central portion of the end wall is compensated for with a slight inward curve of the central portion of the end wall, resulting in additional distance traveled.
5 Consequently, the height of the end panel along upper edge 46 is the same for the entire end wall, even though the width of the end panel differs from location to location. Further, due to the combination of the offset score lines and the outer side flap portions, the interior of the tray is effectively equidistant from each other across the entire base of the end wall.

**MARKED UP COPY OF THE PARAGRAPH BEGINNING AT LINE 23 ON
PAGE 9 AND ENDING WITH LINE 11 ON PAGE 10**

Fig. 2b shows the inwardly positioned offset score line 32 offsetting the thickness of outer side ~~flap~~ flaps sections 30. The offset score line moves a central portion of the end wall inward to compensate for and fill the gap between the opposing side flaps. At least the bottom of the central portion of the end wall extends to a point that is effectively on a same linear plane as
5 the interior (visible) sides of flaps 30. That is to say, the interior dimensions of the tray are effectively equalized even ~~though~~ though side flaps are adhered to portions of, but not all of, the end walls. However, as seen in the fig. 2b, the entirety of the central portion of the end wall need not extend to the same position s the interior portion of the side flaps 30. Instead, only a bottom part of the central wall may be fully inwardly positioned. Thus, while the interior ends of
10 the tray are effectively straight, they are not necessarily perfectly straight. Even so, the offset score permits precise dimensioning and support of the bottles in the tray by sufficiently narrowing the tray dimension along the base of the tray to securely bias the central rows of bottles or cans in a stable position.

**CLEAN COPY OF THE PARAGRAPH BEGINNING AT LINE 23 ON PAGE 9
AND ENDING WITH LINE 11 ON PAGE 10**

Fig. 2b shows the inwardly positioned offset score line 32 offsetting the thickness of outer side flap sections 30. The offset score line moves a central portion of the end wall inward to compensate for and fill the gap between the opposing side flaps. At least the bottom of the central portion of the end wall extends to a point that is effectively on a same linear plane as the
5 interior (visible) sides of flaps 30. That is to say, the interior dimensions of the tray are effectively equalized even though side flaps are adhered to portions of, but not all of, the end walls. However, as seen in the fig. 2b, the entirety of the central portion of the end wall need not extend to the same position s the interior portion of the side flaps 30. Instead, only a bottom part

IP-022824

Appl. No. 10/632,383

Amdt. dated May 4, 2005

Reply to Office Action dated November 4, 2004

10 of the central wall may be fully inwardly positioned. Thus, while the interior ends of the tray are effectively straight, they are not necessarily perfectly straight. Even so, the offset score permits precise dimensioning and support of the bottles in the tray by sufficiently narrowing the tray dimension along the base of the tray to securely bias the central rows of bottles or cans in a stable position.

IP-022824
Appl. No. 10/632,383
Amdt. dated May 4, 2005
Reply to Office Action dated November 4, 2004



**MARKED UP COPY OF THE PARAGRAPH BEGINNING AT LINE 5 ON PAGE
11 AND ENDING WITH LINE 17 ON PAGE 11**

Fig. 4 shows ~~shown~~ an alternative embodiment wherein an offset score line 56 is arcuate. In this embodiment, a central portion of an end score line slopes inwardly along an arcuate curve toward the center of the tray. At minimum, an innermost ~~a top~~ point 50 is fully narrowed to a same lateral plane as the interior surface of the outer side flap section 30 when the tray is erected.

5 In the present embodiment, innermost ~~top~~ point 50 is inwardly positioned 3/8 inches as compared to score line 18, which accounts ~~account~~ for the 3/8 inch thickness of the outer side flap section 30. Thus, the interior dimensions of the tray are equalized by accounting for the thickness of the side flaps to securely bias a central row or rows of items within the tray. The difference between score line 18 and offset score line 56 can be changed if a different thickness

10 of paperboard is used. Other embodiments can include an arcuate score line with different paths, such as those with steeper or lesser slopes. Additional embodiments can include other non-arcuate score lines that fill the gap between opposing side flaps while maintaining the spirit of the invention.

**CLEAN COPY OF THE PARAGRAPH BEGINNING AT LINE 5 ON PAGE 11
AND ENDING WITH LINE 17 ON PAGE 11**

Fig. 4 shows an alternative embodiment wherein an offset score line 56 is arcuate. In this embodiment, a central portion of an end score line slopes inwardly along an arcuate curve toward the center of the tray. At minimum, an innermost point 50 is fully narrowed to a same lateral plane as the interior surface of the outer side flap section 30 when the tray is erected. In

5 the present embodiment, innermost point 50 is inwardly positioned 3/8 inches as compared to score line 18, which accounts for the 3/8 inch thickness of the outer side flap section 30. Thus, the interior dimensions of the tray are equalized by accounting for the thickness of the side flaps to securely bias a central row or rows of items within the tray. The difference between score line 18 and offset score line 56 can be changed if a different thickness of paperboard is used. Other

IP-022824
Appl. No. 10/632,383
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Reply to Office Action dated November 4, 2004

- 10 embodiments can include an arcuate score line with different paths, such as those with steeper or lesser slopes. Additional embodiments can include other non-arcuate score lines that fill the gap between opposing side flaps while maintaining the spirit of the invention.

IP-022824
Appl. No. 10/632,383
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REMARKS/ARGUMENTS

Favorable reconsideration of this application is requested in view of the amendments made above and the remarks that follow.

Petition and fee for a three (3) month extension of time to and including May 4, 2005, are attached hereto.

The specification and claims have been carefully reviewed for informalities, and corrections made as necessary. Those informalities noted and pointed out by the examiner have been corrected, including renumbering of claims 16-24. It is believed that the application now is in compliance with the requirements of 35 USC 112.

Claims 1, 7 and 14, as filed, were rejected under 35 USC 102(b) as anticipated by Liman (3062429). It is respectfully submitted that this patent offers a different solution to a different problem than that offered by the present invention. Liman is concerned with preventing or minimizing outward bulge of the relatively long side walls of his container, and to do this he gives a slight inward curve to the entire length of the fold lines 9 joining the side walls to the bottom wall. There is no concern with inadequate and uneven support to articles held in the container because of an interior space that has a different length dimension at the center of the tray than at the sides where in-turned flaps are attached to the inner surface of the end walls. In Liman both the side walls and the end walls have inner panels 5 and 6, respectively, that provide a smooth, planar inner wall surface, with the same length and width dimensions at all points along the side and end walls.

The present invention, on the other hand, and as now clearly defined in the claims, is concerned with the extra length dimension along the interior center of the tray that results from the inwardly folded flaps attached to the inner surface of the ends of the end walls. In other words, the thickness of the in-turned flaps shortens the length dimension between the opposite end walls in the areas of the flaps, whereby extra space exists along the longitudinal center of the tray. This poses a problem with respect to adequate support of objects, such as cans or bottles, for example, placed in the tray. The extra length dimension along the longitudinal center portion

IP-022824
Appl. No. 10/632,383
Amdt. dated May 4, 2005
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of the tray permits objects in this area to shift. By inwardly offsetting the central portion of the end wall fold line in the area between the flaps, the end wall in the area of the offset fold line is also offset inwardly, and the interior longitudinal space is equalized so that the same longitudinal dimensions exist along the entire end wall, thus providing secure and uniform support of the objects and preventing them from shifting. The claims have been amended to clearly define this concept.

To anticipate a claim, a reference must contain a clear teaching of every element claimed. It is submitted that neither Liman nor any of the other references of record disclose or suggest either the particular structure as now claimed in the present application, or the problem or solution offered. Accordingly, the rejection of claims 1, 7 and 14 as anticipated by Liman should be withdrawn.

Claims 4-6 and 13, as filed, were also rejected as anticipated by Liman, with the observation that it would be obvious to attach the flaps with staples or adhesive, and the particular size of the tray does not provide a patentable distinction. However, Liman fails to teach the basic invention, as discussed above. Accordingly, the rejection of these claims as anticipated by Liman should be withdrawn.

Claims 10-12, as filed, were rejected under 35 USC 103(a) as obvious in view of Liman modified by Fowler (5624031) for its teaching of cut outs at the corners to improve folding. However, Liman fails to teach the basic invention, as discussed above, and modification by Fowler to provide cut outs at the corners would not supply the inventive elements lacking in Liman. Accordingly, the rejection of these claims as obvious in view of Liman modified by Fowler should be withdrawn.

Claims 15-19 and 22-24, as filed, were rejected under 35 USC 103(a) as obvious in view of Elford (3841476) modified by Liman. The examiner proposed to modify Elford by providing an inwardly curved score line in view Liman. However, it is submitted that the tray of Elford possesses the very same problem that has been solved by applicant, i.e., the end walls in Elford have in-turned flaps adhered to the side portions of the end walls, whereby the longitudinal

IP-022824

Appl. No. 10/632,383

Amdt. dated May 4, 2005

Reply to Office Action dated November 4, 2004


interior space between that portion of the end walls located between the flaps is greater than the interior space between the end walls where the flaps are attached. Liman is not concerned with correcting this problem. Instead, he is concerned with preventing or minimizing bulge of the side walls. The interior surfaces of the side and end walls in Liman are essentially smooth and planar, with the same space between the walls at all points along their length. Thus, unless one were intent on preventing or minimizing bulge of the side walls in Elford, there would be no motivation to modify the Elford structure in view of Liman. Even if such modification were made, the presently claimed structure would not result.

It is submitted that the claims as now amended patentably and allowably distinguish over the prior art, and an early and favorable action is requested.

Respectfully submitted,

Patricia A. Tumminia, Applicant

Date: May 4, 2005

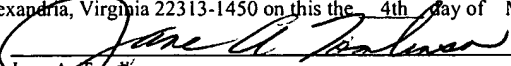

Daniel C. Stelter
Counsel for Applicant
Reg. No. 40,830

International Paper Company
6285 Tri-Ridge Blvd.
Loveland, OH. 45140
513/248-6208 telephone
513/248-6455 facsimile

DCS/jat

CERTIFICATE OF TRANSMISSION/MAILING

The undersigned hereby certifies that a true and accurate copy of the within "Response Amendment", together with all attachments referred-to therein, is being transmitted to the Honorable Commissioner for Patents, herewith or deposited via first-class mail, postage prepaid, addressed to Commissioner for Patents, Post Office Box 1450, Alexandria, Virginia 22313-1450 on this the 4th day of May, 2005.


Jane A. Tomlinson